

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A handling device for the repositioning of parts comprising a pivot arm able to be driven by a drive means to perform an oscillating movement about a stationary first pivot axis, a handling part serving for carrying a gripper, which while performing a second pivot movement is able to be pivoted about a stationary second pivot axis and furthermore is able to be set radially in relation to the second pivot axis while performing a linear stroke, and further comprising a path setting cam extending at least partly around the first pivot axis, and having two linear terminal sections, the handling part including a cam follower being engaged with the path setting cam and an entrainment member coupled to the pivot arm such that by means of a cam follower, the cam follower is able to be moved radially by relatively to the pivot arm with respect to radially as regards its first pivot axis and the pivot arm so acts, during its first pivoting movement, in a driving manner on the cam follower that same is shifted along the path setting cam and accordingly the handling part moves, during each handling cycle, along a handling path, which has two linear terminal sections, in which the handling part respectively performs exclusively a linear stroke.

2. (Original) The handling device as set forth in claim 1, wherein the two linear terminal sections of the path setting cam extend at a right angle to one another.

3. (Original) The handling device as set forth in claim 1, wherein the longitudinal axes of the two linear terminal sections of the path setting cam meet at a common point on the second pivot axis.

4. (Currently Amended) The handling device as set forth in claim 1, wherein ~~the pivot arm so engages an entrainment member arranged on the handling part for drivingly acting on the cam follower that~~ the entrainment member is kinematically coupled with the pivot arm in the direction of the first pivotal movement while ~~however~~ being able to move radially in relation to the first pivot axis in relation to the first pivot axis.

5. (Original) The handling device as set forth in claim 4, wherein the cam follower and the entrainment member lie in sequence on a common entrainment axis parallel to the first and the second pivot axis.

6. (Currently Amended) The handling device as set forth in claim 1, further comprising a handling arm having said handling part movably supported thereon and a loading means pivoting with the pivot arm and which takes effect between the pivot arm and the cam follower and biases the cam follower constantly against a flank of the path setting cam.

7. (Currently Amended) The handling device as set forth in claim 1, wherein the handling part is a component of a pivotally moving handling arm, the handling arm additionally having a bearing part able to pivot to define the second pivot axis, and a linear guide means provided on said bearing part, wherein on which bearing part the handling part is supported on said linear guide means arranged in a linearly adjustable manner with respect to said bearing part for the definition of the axis of the linear stroke movement.

8. (Currently Amended) The handling device as set forth in claim 7, wherein the path setting cam is of slotted design and the cam follower fits into the path setting cam, and to the side adjacent to at least one of the linear terminal sections

of the path setting cam, abutment means are provided, on which in the terminal position the bearing part rests ~~rest~~ laterally, ~~and the same is so designed~~ the abutment means being adjustable so that the cam follower is thrust against the flank on the other side of the path setting cam.

9. (Original) The handling device as set forth in claim 1, further comprising shock absorber means, which are associated with the two linear terminal sections of the path setting cam and cooperate with the handling part, when same moves into the respective terminal position as part of the linear stroke movement.

10. (Currently Amended) The handling device as set forth in claim 1, wherein the path setting cam extends between the first and the second pivot axis, ~~axis~~, the first pivot axis being located on the concave side of the curvature and the second pivot axis being located of the convex side of the curvature.

11. (Currently Amended) The handling device as set forth in claim 1, wherein the ~~second pivot axis is placed as a linear extension of the~~ linear terminal sections of the path setting cam have respective longitudinal axes which meet at a common point coinciding with the second pivot axis, the linear terminal sections having their closed ends facing away from the second pivot axis.

12. (Original) The handling device as set forth in claim 1, wherein the first pivot axis is placed between the path setting cam and the second pivot axis.

13. (Currently Amended) The handling device as set forth in claim 1, wherein the ~~second pivot axis is placed as a linear extension of the~~ linear terminal sections path setting cam have respective longitudinal axes which meet at a common point coinciding with the second pivot axis, the sections having their closed ends directed toward the second pivot axis.

14. (Currently Amended) The handling device as set forth in claim 12, wherein the first pivot axis is approximately surrounded by the path setting cam, the second pivot axis being attached in an ~~the~~ open region between the two linear terminal sections of the path setting cam.

15. (Currently Amended) The handling device as set forth in claim 1, wherein said path setting cam comprises two cam members, said cam members being adjustable so that the angle between the two linear terminal sections of the path setting cam may be varied.

16. (Currently Amended) The handling device as set forth in claim 15 ~~4~~, wherein at least one ~~and preferably at least each~~ of the two linear terminal sections of the path setting cam is able to be pivoted about a pivot center lying on the second path setting cam in relation to the respectively other linear terminal section and is able to be positioned in a different angular position.

17. (Original) The handling device as set forth in claim 16, wherein the longitudinal axes of the two linear terminal sections of the path setting cam intersect with the second pivot axis irrespectively of the instantaneous angular position.

18. (Original) The handling device as set forth in claim 16, wherein the pivoting terminal section of the path setting cam is located on a cam member which is pivotally arranged on a support member in relation to which the first and the second pivot axis are arranged in a stationary fashion, the pivot center being preferably arranged on the second pivot axis.

19. (Original) The handling device as set forth in claim 18, wherein the two linear terminal sections of the path setting cam are provided on separate, cam members able to be set independently from each other in relation to the support body.

20. (Original) The handling device as set forth in claim 18, comprising circularly arcuate guide means for pivotally bearing the respective cam member in relation to the support body.

21. (New) A handling device for the repositioning of parts comprising:
a support body;
a drive means disposed on said support body;
a pivot arm driven by said drive means to perform an oscillating pivoting movement about a stationary first pivot axis;
a path setting cam supported on said support body, said path setting cam defining a path extending at least partially around said first pivot axis and having two linear terminal sections;
a handling arm including a cam follower engaged with said path setting cam and an entrainment member coupled to said pivot arm, said handling arm being driven by said pivot arm about a stationary second pivot axis, wherein said cam follower moves along the path defined by said path setting cam; and
a handling part movably carried by said handling arm, said handling part being coupled to said handling arm cam follower such that said handling part pivots with said handling arm about said second pivot axis and translates linearly with respect to said handling arm when said cam follower moves along said linear terminal sections of said path defined by said path setting cam.